

Equipment for Testing

Z/032/61/011/006/003/004
E073/E335

speed variation can be obtained. The photograph, Fig. 1, shows the overall arrangement of the equipment; the operating range of the machinery has been so chosen that for a 6 mm dia. specimen of a strength up to 120 kg/mm² the minimum speed should be comparable with that of pendulum impact test machines, i.e. 5 m/sec. The maximum theoretical speed is 219.8 m/sec. The practically achieved maximum speed was measured at 187.3 m/sec. The disc is 650 mm in diameter, 40 mm wide at the rim and its mass is large enough to prevent reduction of the minimum speed during fracturing of the specimen by more than 1.4%. The theoretically permissible maximum r.p.m. are 6 000. Fig. 6 is a dimensional sketch of the dynamometer (odporový tenzometr = strain gauge). Fig. 7 is a dimensional sketch of the test specimen. The strain gauges are of Czech manufacture. For several Czech steels the loading force - time diagrams were recorded oscillographically and these oscillograms enable determining the influence of the loading speed on the mechanical properties and determining the time required for achieving

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limit states. Very good agreement was obtained between the theoretical relations derived on the basis of the dislocation theory of Cottrell and Campbell, who investigated the influence of the loading speed and temperature on the yield point of low-carbon steels, and experimental results obtained at test temperatures between $+21^{\circ}\text{C}$ and -60°C . The plot, Fig. 10, shows theoretical curves (Curves 1), theoretical curves according to Campbell (Curves 2) and experimental values (O) measured by the author. There are 10 figures, 2 tables and 16 references: 3 Czech and 13 non-Czech. The four latest English-language references are: Ref. 6 - Clark, 1947, ASTM, Proceedings, No. 47; Ref. 13 - Gibson, 1952, Proc. Inst. mech. Eng., No. 1; Ref. 15 - Hendrickson, 1958, Trans. ASM, No. 50 and Ref. 16 - Clark, 1949, ASTM, Proceedings, No. 49.

ASSOCIATION: LZ, Pilsen

Card 3/6

L 22066-66 EWP(w)/T/EWP(t) JD

ACC NR: AP6010702

SOURCE CODE: CZ/0034/65/000/004/0261/0267

AUTHOR: Kermes, Jaroslav (Engineer; Candidate of sciences)

ORG: Research and Testing Institute, ZVIL, Plzen (Vyzkumny a zkusebni ustav ZVIL) ⁴¹ B

TITLE: Effect of some metallurgical factors on the mechanical properties of rolled products of great thickness ^{44.55 18}

SOURCE: Hutnicke listy, no. 4, 1965, 261-267

TOPIC TAGS: aluminum, solid solution, metal property, solid mechanical property, steel, titanium, metallurgic furnace

ABSTRACT: The properties of the product are basically a function of the metallurgical properties of the metal. The most important single factor is the Al content of the metal; the optimum amount should be present as a solid solution in the metal. The property influenced to the greatest extent is the notch toughness. The process must be conducted so that the required amount of aluminum be present in solution; simply adding the suitable amount of Al to the charge is not enough. 1 kg of Al and 0.5 kg of Ti per ton of steel are usually adequate for open hearth furnace heats and atmospheric pressure teeming. For electric furnace heats, and for ingot casting into evacuated molds, the amounts should be checked for individual equipment, and suitably modified. Orig. art. has: 13 figures and 8 tables. [JPRS]

SUB CODE: 11 / SUBM DATE: none / ORIG REF: 008 / SOV REF: 002

Card 1/1 ^{mg5} UDC: 621.944.3-412: 669.18 ²

KERMOYAN, Diran V.,

"The Conductivity of Sodium Aluminate Solutions" by Kermoyan, M. G. Manveylan, and L. G. Shaginyan, Izvestiya, Armenian Academy of Sciences, X, 5, 305-313, 1957.

"The Conductivity of Concentrated Solutions of Sodium and Potassium Hydroxides, Their Carbonates, and Mixtures of NaOH and KOH at 25' by Kermoyan, Manvelyan, A. G. Eganyan, and A. M. Kocharyan, Izvestiya, Armenian Academy of Sciences, VIII, 4, 73-78, 1955.

"Effect of Temperature on Electric Conductivity of Concentrated Solutions of NaOH, KOH, Na_2CO_3 , and K_2CO_3 " by Kermoyan, Manveylan, Eganyan and Kocharyan, Izvestiya, Armenian Academy of Sciences, IX, 2, 3-12, 1956.

"Study of the Electric Conductivity of Solutions of Sodium Silicate" by Kermoyan, Manvelyan, and Eganyan, Izvestiya, Armenian Academy of Sciences, X, 4, 225-236, 1957.

VALEN, T. I.; GABRIEL, A. L.; KALININ, I. S.; Prilozheniye uchastiya: KERN, A. P.

On titrim between nonaqueous solutions of copper compounds
with tetramethylthiuram disulfide and aqueous solutions of
silver and mercury. Ukr.khim.zhur. 30 no.5:452-457 '64.

(MIRA 18:4)

1. Institut khimii Khar'kovskogo gosudarstvennogo universiteta.

ACCESSION NR: AP4035096

S/0032/64/000/005/0631/0632

AUTHORS: Vatolin, N. A.; Kern, E. M.

TITLE: Apparatus for measuring the density of molten metals at high temperatures

SOURCE: Zavodskaya laboratoriya, no. 5, 1964, 631-632

TOPIC TAGS: molten metal density, density measurement, high melting metal, amperovoltmeter Ts 315

ABSTRACT: An apparatus was developed for determining the density of molten metals and alloys with high melting points. It operates by measuring the level melt and represents an improvement on the apparatus designed by D. A. Petrov and V. M. Glazov (Zavodskaya laboratoriya, XXIV, 1, 34, 1958). In the improved model (see Fig. 1 of the Enclosure) a crucible (1) is suspended by molybdenum wires (3) with a coefficient of thermal expansion equal to that of the rods (4). The heating assembly contains a graphite element (5), a quartz or graphite screen (6), a water-cooled case (7), and a thermocouple (8). The joints in the case are sealed with rubber gaskets (10). A movable bar (12) operates through a Wilson joint (11) and is connected to an external micrometric adjuster (13). One of the rods (4) is

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connected to the case and the other to an ohmmeter (14). The circuit is closed when the rods reach the metal. To prevent melting of the rods, they are kept from touching the molten metal by bearing against an alundum boat (15) with its bottom either covered with molybdenum foil or rubbed with graphite. Before starting the operation, the apparatus is evacuated to 10^{-2} mm Hg and is filled with an inert gas. The crucible is graduated for volume at room temperature. Density determinations of molten iron and silicon produced values close to those obtained by other methods. Orig. art. has: 1 figure.

ASSOCIATION: Institut metallurgii Ural'skogo filiala Akademii nauk SSSR (Metallurgical Institute, Ural Branch, Academy of Sciences SSSR)

SUBMITTED: 00

DATE ACQ: 20 May 64

ENCL: 01

SUB CODE: MM

NO REF SOV: 001

OTHER: 001

Card 2/3

CHOJECKI, Zygmunt; KERN, Fred

Effect of experimental liver cirrhosis and of CCl₄ intoxication on glucuronic transferase activity in rat livers. Polskie arch. med. wewn. 31 no.2:147-160 '61.

1. Z Department of Internal Medicine, University of Colorado School of Medicine, Denver. U.S.A. Kierownik: prof. dr G. Meiklejohn.

(LIVER CIRRHOSIS exper)	(CARBON TETRACHLORIDE toxicol)
(TRANSFERASES metab)	(LIVER metab)

KERN - GUSTAV

✓ Extracted coal briquetted without binders. Vladimir
Vielick and Gustav Kern. *Patib* 32, 235-9(1952); cf.
ibid. 31, 297-303(1951). Solid fuels for these expts. were
coals with high content of wax and exld. coals i ratios of (1)
1:1, 1:2, and 1:3. The briquetting was done at room
temp., at 500°, and at 800° on an Amies press. Heat-
treatment had no effect on the mech. properties of the bri-
quets; it only decreased water absorption. J. Lederer

KERN, G.

VCELAK, V., KERN, G.

" Briquetting Powdery Iron Ores." p.6.
(Rudy, Vol.1, No.1, Feb. 1953, Praha.)

SO: Monthly List of East European Accessions, Vol.3, No.3; Library of Congress, March 1954,
Uncl.

KERN, Henryk, doc., dr.

Agricultural Research Institute Biebrza. Gosp wodna 22 no.1:43-44
'62.

KERN, Henryk, prof., dr.

Physiography of meadows in the Opatowka valley considering the erosion dynamics of the catchment area on the loess in the district of Sandomierz. Gosp wodna 22 no.1:44 '62.

KERN, Jozef, inz.

Analysis of the influences on time consumption in timber
hauling by tractors. Les cas 10 no. 4:371-400 Ap '64.

1. Research Institute of Forestry, Banska Stiavnica, Research
Station Oravsky Podzamok.

KERN, Jozef, inz.

Fuel consumption in hauling timber by the TDT-40 tractors.
Les cas 9 no. 11: 1049-1060 N '63.

1. Vyskumny ustav lesneho hospodarstva, Banska Stiavnica,
Vyskumna stanica Oravsky Podzamok.

KERN, Jozef, inz.

Extension of winch rope into the stands; the most straining operation of timber logging and possibilities of making it easier. Les cas 9 no.10:931-940 0 '63.

1. Vyskumny ustav lesneho hospodarstva, Banska Stiavnica, Vyskumna stanica Oravsky Podzamok.

KERN, Josef, inz.

Full-tree skidding of conifer timber by the TDT-40 and Zetor 50 Super tractors. Les cas 10 no.11:971-986 N '64.

1. Research Institute of Forestry, Banska Stiavnica, Research Station Oravsky Podzamok.

KERN, L.

RUMANIA/Microbiology - General Microbiology .

F-1

Abs Jour : Ref Zhur - Biol., No 15, 1958, 67054

Author : Teitel, M., Kern. L., Constantin. St.

Inst : -

Title : The Youmans' Culture Medium with Egg Yolk for Inoculations
in the Diagnosis of Tuberculosis.

Orig Pub : Ftiziologia, 1957, 6, No 6, 549-553

Abstract : No abstract.

Card 1/1

- 2 -

KERN, V.

Structure of production costs and the application of bonus scales to engineering and technical workers and employees of enterprises.

Biul. nauch. inform.: trud i zar. plata 4 no.1:31-35 '61.

(Leningrad—Machinery industry—Costs) (Bonus system) (MIRA 14:3)

KERN, V.

Norms for issuing funds for wages when the production plan is
overfulfilled. Biul.nauch. inform.: trud i zar. plata 4 no.8:
20-24 '61. (MIRA 14:10)
(Leningrad Province--Wages--Machinery industry)

KERN, V. G.

AID P - 2187

Subject : USSR/Medicine

Card 1/1 Pub. 37 - 7/19

Authors : Yakovlev, B. V. and Kern, V. G.

Title : Use of aerosols obtained by means of compressed air for the disinfection of passenger cars

Periodical : Gig. i san., 5, 32-34, My 1955

Abstract : A method is described and recommended for the extermination of insects in passenger cars by means of DDT solutions. The compressed air, which is used for the testing of brakes and is always available in railroad switch yards, transforms these solutions into foggy substances. The cars are sprayed with these DDT aerosols which kill the insects and do not cause any material damage. This disinfection method is used now on the Oktyabr'skaya (October) Railroad. Six Russian references (1949-1951).

Institution : Medical and Epidemiological Station of the Oktyabr'skaya (October) Railroad

Submitted : Ap 21, 1954

KHEM, V.G.; YAKOVLEV, B.V.

Experience in disinfection of surfaces with chloramine aerosols.
Zhur, mikrobiol. epid. i imm. 27 no.4:112-115 Ap '56. (MLRA 9:7)

1. Is dorozhnoy i Leningrad-Moskovskoy sanitarno-epidemiologicheskoy
stantsii Oktyabr'skoy zheleznoy dorogi.

(CHLORAMIDE

aerosols for disinfection of surfaces)

(DISINFECTION AND DISINFECTANTS

surfaces, with chloramine aerosols)

(AEROSOLS

chloramine for disinfect.)

KERN, V. G., YAKOVLEV, B. V.

"Experience of the use of aerosols obtained by means of compressed air for the disinsectization and disinfection of surfaces."

report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists and Infectionists, 1959.

YAKOVLEV, B.V.; KERN, V.G.

Disinfectant properties of chloramine solutions as related to the degree of atomization; author's abstract. Zhur.mikrobiol., epid.i immun. 30 no.11:119 N '59. (MIRA 13:3)

1. Iz Dorozhnoy sanitarno-epidemiologicheskoy stantsii Otktyabr'skoy zheleznoy dorogi.

(CHLORAMINE)

APPROVED FOR RELEASE 06/13/2000

CIA-RDP86-00513R000721530007-6"

Connection of the nervous system of the mother and fetus and the neurophysiology of labor. Akush.i gin. 35 no.5:15-22 S-0 '59. (MIRA 13:2)

(PREGNANCY, physiol.)
(FETUS, physiol.)
(LABOR, physiol.)

KERN, J.

"Electromagnetic relays. Performance, structure, measurements"
by P. Chouquet. Reviewed by J. Kern. Rud met zbor no.1:51-52
'62.

KERN, J.

"Connections of strong current technics" by Fritz Henze. Vol. 2:
"The control and regulation connections." 2d ed. Reviewed by J.
Kerno. Rud met zbor no.1:52-53 '62.

KERN, J.

"Fundamental knowledge of engineers." 4th ed. Reviewed by J.
Kern. Rud met zbor no.1:53 '62.

KERN, J.

"Applied television technics in industry, household, and science"
by Gerhard Schaaf. Reviewed by J. Kerne. Rud met zbor no.1:
86 '62.

KERN, J.

"The little lexicon of formulas" by A. Arndt. 5th ed. Reviewed
by J. Kern. Rud met zbor no.1:90 '62.

KERN, J.

"Electric and electronic measures" by J. Thurin. Reviewed by
J. Kern. Rud met zbor no.1:85-86 '62.

KERN, J.

"Computing the flow of electric circuits" by Klaus Lunze. 2d ed.
Reviewed by J. Kern. Rud met zbor no.1:89-90 '62.

KERNIC, J.

"Some problems in the field of electrical engineering"
by G. Mierdel and S. Wagner. 2d ed. Reviewed by J. Kernic.
Rud met sbor no.3:276 '62.

KERNIC, J.

"Theoretical bases of electrical engineering" by [deceased]
P.L. Kalantarow [Kalantarov, P.L.], and L.R. Neumann.
Vol.1. 2d ed. Reviewed by J. Kernic. Rud met zbor no.3:287
'62.

KERNIG, Janko, inž.

Bases of the automatic steering of conveying machinery. Rud met zbor
no.2:151-159 '62.

1. Oddelek za montanistiko Univerze v Ljubljani, Askerceva 20.

KERNIC, J.

"Electric measures (Continuous and low frequency)" by Joan Baurand.
Vol. 2. Reviewed by J. Kernic. Rad metabor no.2:161 '62.

K. Cazafura; PAVKO, D.; SIRCA, F.; KERSNIC, Viktor, prof. dr. inz.;
KOSAK, K.; GRAFENAUER, S.; PODGORNIK, A.; KERNC, J.; DOBOVISEK,
Bogomir, docent, dr. inz.; OCEPEK, Drago, docent, dr. inz.;
HOMAN, A.; MARCEC, M.; RANKEL, J.; CRNIVEC, M.; SMAJIC, N.;
CUCEK, I.; KERSNIC, V., ml.; VODOPIVEC, F.

New books. Rud met zbor no. 2:144-187 '63.

1. Glavni urednik, "Rudarsko-metalurski zbornik" (for Viktor Kersnic).
2. Clani Uredniškega odbora, "Rudarsko-metalurski zbornik" (for Dobovisek and Oceppek).

SIRCA, F.; DOBOVISEK, Bogomir, docent, dr. inz.; GRAFENAUER, S.; KOSOVINC, I.;
HAMRLA, B.; VODOPIVEC, F.; KUSCER, D.; KERNČ, J.; DROBNE, F.;
PAVKO, D.; CAZAFURA, K.; TURK, St.; OCEPEK, Drago, docent, dr. inz.;
ROSINA, A.; ZUMER, M.; SOVINC, I.

New books. Rud met zbor 4:431-457 '63.

1. Članovi Uredniškega odbora, "Rudarsko-metalurški zbornik"
(for Dobovisek and Ocepek).

PAULIN, A.; OCEPEK, D.; CAZAFURA, K.; KUSCER, D.; VODOPIVEC, F.; SOVIN, I.;
PAVKO, D.; JURCA, S.; KERŠNIC, V.; DRNOVSEK, J.; GRAFENAUER, S.;
KERNČ, J.

New books. Rud met sbor 3:307-334 '64.

KERNIC, Kresimir; BOSNAR, Marijan; RUDEZ, Vidko

Transverso-axial stratigraphic anatomy of the lung. Rad. med.
fak. Zagreb. 11 no.1:23-32 '63.

(LUNG) (TOMOGRAPHY) (THORACIC RADIOGRAPHY)

5

KERNIC, Kresimir; BCSNAR, Marijan; RUDEZ, Vidko

Transverso-axial stratigraphic anatomy of the lung. Rad. med.
fak. Zagreb. 11 no.1:23-32 '63.

(LUNG) (TOMOGRAPHY) (THORACIC RADIOGRAPHY)

S

BORIC, Dragica, dr.; KERNIC, Kresimir, dr.

Comparative clinical studies on oral cholecystography with
triiodinated and diiodinated contrast media. Liječn. vjesn.
83 no.3:231-238 '61.

1. Iz Zavoda za radiologiju Opće bolnice dra M. Stojanovica u
Zagrebu. (CONTRAST MEDIA) (CHOLECYSTOGRAPHY)

BASIC, Marko, dr.; KIRHMAJER, Vladimir, dr.; KERNC, Kresimir, dr.

Our experience in the treatment of malignant ovarian tumors.
Liječn vjesn. 85 no.1:15-20 '63.

1. Iz Zavoda za radiologiju Opće bolnice "Dra M. Stojanovica"
u Zagrebu.

(OVARIAN NEOPLASMS) (SURGERY, OPERATIVE)
(NEOPLASM RADIOTHERAPY) (NEOPLASM STATISTICS)

S

KERN-JEDRZYCHOWSKI, T.

(MOTORYZACJA, Vol. 6, No. 12, Dec. 1953, Warszawa, Poland)

"To consideration of the methods of exploitation planned for the year.1954."
p. 333.

SO: MONTHLY LIST OF EAST EUROPEAN ACCESSIONS, L.C., Vol. 3, No. 4, APRIL 1954

KERN-JADRYCHOWSKI, T.

"Planning the Work of a Truck Driver." p. 43, (MOTORYZACJA, Vol. 9,
No. 2, Feb. 1954. Warszawa, Poland.)

SO: Monthly List of East European Accessions, (EEAL), LC,
Vol. 3, No. 12, Dec. 1954, Uncl.

KEFNC, J.

On inductive heating and its use for tempering and soldering. p. 372.
(Nova Proizvodnja. Vol. 7, no. 6, Feb. 1957, Yugoslavia)

SO: Monthly List of East European Accessions (EEAL) ⁸18, Vol. 6, no. 7, July 1957, Uncl.

KERNIC, Kresimir

Significance and role of sagittal layers in diagnostic examination
of the lung. Rad. med. fak. Zagreb 8 no.3:261-276 '60.

(LUNG DISEASES diag)

KERNEL, G.

Total photonuclear absorption in aluminum. M. V. Mihaljovic, G. Pregl, G. Kernel, and M. Kregar (J. Stefan Inst., Ljubljana, Yugoslavia). *Phys. Rev.* 114, 1821-2 (1959).—Max. of total photonuclear absorption cross section in Al is 100 ± 10 mb.; integrated cross section is estd. about 800 mb.-m.e.v. Jack J. Bulloff.

KERNER, A.

KROMPECHER, St.; LEIKES, Gy.; GALAMB, B.; KERNER, A.

Effect of dietary intake of egg shells on blood formation. Acta
physiol. hung. 11(Suppl):68-69 1957.

1. Institut fur Anatomie, Histologie und Embryologie der Medizinischen
Universitat, Debrecen.

(EGGS

egg shell, eff. of dietary intake on erythrocyte form.
in rats (Ger))

(ERYTHROCYTES

form., eff. of dietary intake of egg shells in rats (Ger))

KERNER, AURELNE
LODY, Laszlo, Dr.; KROMPECHER, Istvan, Dr.; LELKE, Gyorgy, Dr.; MESZAROS, Lajos,
Dr.; KERNER, Aurelne

Effect of eggshell feeding on blood formation in children. Orv. hetil.
99 no.6:192-194 9 Feb 58.

1. A Nyirbatori Allami Gsecsemootthon (vezeto-foorvos: Lody Laszlo dr.)
es a Debreceni Orvostudomanyi Egyetem Anatomiai, Szövet- es Fejlodestani
Intezetének (igazgato: Krompecher Istvan dr. egyet. tanar) kozlemenye.

(EGGS

eggshell feeding inducing increased erythropoiesis in child.
(Hun))

(ERYTHROCYTES

form., increase induced by eggshell feeding of child. (Hun))

L 17778-63

RM/WW/MAY

EPR/EMP(j)/EPF(c)/ENT(m)/BDS

AFFTC/ASD

Ps-4/Pc-4/Pr-4

ACCESSION NR: AP3005854

S/0051/63/015/002/0274/0280

76
72

AUTHOR: Averina, L.N.; Kerner, B.I.; Nikulina, R.A.; Sokolovskaya, T.I.; Tsirlin, Yu.A.

TITLE: Light collection in scintillators

SOURCE: Optika i spektroskopiya, v.15, no.2, 1963, 274-280

TOPIC TAGS: scintillator, light collection, scintillator design

ABSTRACT: Expressions are derived for the light collecting coefficient τ of a cylindrical scintillator with polished surfaces and no packaging. The light-collecting coefficient is defined as the ratio of the radiant energy emerging through one face of the scintillator and entering the photomultiplier to the total energy produced by the scintillations in the volume of the scintillator with an absorption coefficient k and an index of refraction n . Knowledge of τ is obviously important for designing efficient scintillators and evaluating their overall efficiency. Fresnel reflection from the glass face of the photomultiplier tube is taken into account (reflections from the top and bottom ends of the cylinder compensate each other). The results of calculations by means of the deduced formulas were compared with experiment in two ways: 1) modelling, using a plexiglas cup filled with

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glycerol into which there was lowered a glass sphere with a persistent phosphor, and 2) measurements with standard plastic scintillators (polystyrene + terphenyl + POPOP) 20 mm in diameter and of different heights, irradiated from an alpha-particle source. The experimental variation of τ with the height of the scintillator cylinder is consistent with the calculated dependence. Thus, the deduced formulas can be used for qualitative design calculations as well as for quantitative evaluations if the basic parameters of the scintillator material are known. We thank L.L. Nagornaya for supplying the optical characteristics of the plastic and V.L. Timan for programming the necessary computations on a computer." Orig.art.has: 28 formulas and 8 figures.

ASSOCIATION: none

SUBMITTED: 20Oct62

DATE ACQ: 06Sep63

ENCL: 00

SUB CODE: PH

NO REP SOV: 005

OTHER: 002

Card 2/2

ALB...
TOISTOV, Mikhail Alekseyevich; ~~KERNER, D.B.~~, inzhener, retsenzent; KUVSHIN-
SKIY, V.V., kandidat tekhnicheskikh nauk, redaktor; DUGINA, N.A.,
tekhnicheskii redaktor
[Pneumatic and pneumatic-hydraulic attachments] Pnevmaticheskie i
pnevmodravlicheskie prisoobleniia. Izd. 2-oe, dop. i perer.
Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1956.
202 p. (MIRA 10:4)

(Machine tools--Attachments)

KUBIAK, Marian; KERNER, Gunter

Changes of some physical properties, compression strength and chemical composition of beechwood in the initial stage of decomposition by fungi *Coniophora cerebella* Pers. and *Stereum hirsutum* Willd. Drevarsky vyskum no.4:181-193 '63.

1. Institut fur Forstnutzung, Landwirtschaftliche Hochschule, Poznan (for Kubiak). 2. Institut fur physikalische Holztechnologie und Chemisches Institut fur Forstwirtschaft, Eberswalde (for Kerner).

S/194/62/000/002/003/096
D230/D301

AUTHOR: Kerner, Immo O.

TITLE: Automatic digital computer "ZRA1"

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika,
no. 2, 1962, abstract 2-1-61b (Nemetskiy export, 1961,
no. 15, 20-21)

TEXT: Description of the first digital computer ZRA1, released in batch production by the State Concern Karl Zeiss, Jena (E. Germany). All logical circuits of the control unit are ferrite circuits. The circuit of a logical element consists of two core-transmitters and a core-receiver. Each of the core-transmitters can exist in condition 0 or 1. The core windings are so designed that the circuit contains the resistance of the transmitter circuit. ZRA1 is provided with a magnetic drum of 4096 cell capacity; drum rotation velocity 11,600 rpm, mean selection time 0.25 millisec. The device for feeding the perforated cards processes 80 cards per minute. Since the number or the command is contained in each line of the

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Automatic digital computer ZRA1

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card, the magnetic drum can be filled within 4 minutes. The output results are printed by means of a mechanical device. ZRA1 operates on a double computing system. The scaling of numbers from one computing system to another is accomplished by means of a sub-program. The cell contains 48 double classes, specially subdivided for numbers and for instructions. The instruction presentation is performed by 4 groups of numbers, 3 classes in each. The following groups are considered: Computing, analytical, transmitting and address. Observing certain conditions, these 4 groups can be combined in almost any way, thus providing the registration of a larger number of commands. All 4 groups operate almost always in parallel. Because of this, for processing, say, 150 instructions, the effective speed of operation is 600 per sec. In carrying out the computing operations it is assumed that the first number of the operation is always in the register of results and the second number in one of the eight high-speed memory systems. There exists a great number of sub-programs for ZRA1; frequently, compiled systems are also processed with double accuracy using automatic programming. [Abstracter's note: Complete translation.]

Card 2/2

- KERNER, Imo (Jena)

The ZRA 1 computing machine. Musz elet 16 no.5:10 Mr '61. (EEAI 10:4)
(Germany, Eastern--Calculating machines)

KERNER, J

"Struggling for a Better Quality of Industrial Products." p. 361 (ELEKTROTECHNICKY#
OBZOR, Vol, 42, No.7/8 July/Aug. 1953, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions, LC., Vol. 3, No. 5 May 1954, Unclassified

KERNER, J.

Short-Circuit Laboratory of the Research Institute of Heavy-Current
Engineering increases the quality of electrotechnical production. p. 347.

ELEKTROTECHNIK Vol. 10, no. 11, Nov. 1955

Czechoslovakia

Source: EAST EUROPEAN LISTS Vol. 5, no. 7 July 1956

GARAMVOLGYI, N.; KERNER, J.; CSER-SCHULTZ, M.

The cross striation of the insect flight muscle at different sarcomere lengths. Acta physiol. acad. sci. Hung. 24 no.4: 381-390 '64

1. Institute of Biophysics, Medical University, Pecs.

MURPHY

MURPHY, J. L., KERNER, J.; Institute of Biophysics, Medical University (Orvostudományi Egyetem Siczizikai Intézet), 1962.

"Electron microscopic investigations of the localization of minerals in the cross-striated muscle fibril."

Magyar. Acta Physiologica Academiae Scientiarum Hungaricae, Vol. 22, No. 3-4, 1962, pp. 249-257.

Abstract: [Hungarian article] Authors' English summary abstract: The localization of inorganic substances in the cross-striated muscle fibril was studied by microincineration of the fibrils followed by electron microscopic study. Most of the ash is found in the A-band. A study of stretched and of electron fibrils resulted in the suggestion that the inorganic substances in the fibril may be shifted as a result of the changes in the functional state of the fibril. Of all references, about one-third are Hungarian and two-thirds are Western.

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Electron microscopic investigations into the localization of minerals in the cross-striated muscle fibril. Acta physiol. acad. sci. hung. 22 no.3/4:249-257 '62.

1. Institute of Biophysics, Medical University, Pecs.
(MUSCLES) (CALCIUM) (POTASSIUM) (MAGNESTUM)

KERNER, Josef, inz.

International cooperation of socialist countries in the fine mechanics industry. Jemna mech opt 5 no.12:357-360 D '60.

1. Ministerstvo vseobecneho strojirenstvi, Praha.

PHASE I BOOK EXPLOITATION

538

Kerner, M.S., Engineer

Poluavtomaticheskaya svarka elektrozaklepkami (Semiautomatic Method of Electric Plug Welding) Leningrad, 1955. 13 p. (Series: Leningradskiy dom nauchno-tekhnicheskoy propagandy. Informatsionno-tekhnicheskii listok, no. 94 /782) 7,000 copies printed.

Sponsoring Agencies: Vsesoyuznoye obshchestvo po rasprostraneniyu politicheskikh i nauchnykh znaniy, and Leningradskiy dom nauchno-tekhnicheskoy propagandy.

Ed.: Ryzhik, Z.M.; Tech. Ed.: Gvirtz, V.L.

PURPOSE: This pamphlet is intended for welders.

COVERAGE: The pamphlet presents a brief description of two semiautomatic welding guns, one intended for submerged arc plug welding in horizontal position, the other for electric plug welding in vertical position using flux disks. Detailed drawings of these two welding guns and diagrams of electric circuits are

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Semiautomatic Method of Electric Plug Welding

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included. The author designed these two units with the aid of N.V. Kornil'yev. There are no references.

TABLE OF

CONTENTS: None

AVAILABLE: Library of Congress

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JG/ad
9-10-58

KERNER, Mendel' Saulovich

DREYZENSHTOK, Zundel' Borisovich; KERNER, Mendel' Saulovich; DORMIDONTOV, F.K.,
redaktor; KONTOROVICH, A.I., tekhnicheskij redaktor.

[Semiautomatic electric arc welding of dowels and electric plug
welding] Poluavtomaticheskaja elektrodugovaja privarka shpilek i
svarka elektrosaklepkami. Leningrad, Gos. soizuznos izd-vo sudc-
stroit. promyshl., 1955. 23 p. (MIRA 9:6)
(Electric welding)

KERNER, M.S., inzhener.

Semiautomatic arc welding of dowel pins with built-up
flux washers. Sudostroenie 22 no.10:33-35 0 '56. (MLRA 10:2)

(Electric welding)

KERNER, M.S., inzhener.

Modernization of resistance welding equipment, Sudostroenie 23
no.4:45-48 Ap '57. (MLRA 10:5)
(Electric welding--Equipment and supplies)

PHASE I BOOK EXPLOITATION 918

Kerner, Mendel' Saulovich

Primeneniye novykh tekhnologicheskikh protsessov svarki (Application of New Welding Techniques) Leningrad, Sudpromgiz, 1958. 132 p. 3,500 copies printed.

Resp. Ed.: Korobov, P. D.; Ed.: Kuskova, A. I.; Tech. Ed.: Shitkova, L. M.

PURPOSE: This booklet is intended for welders, design engineers, and other technical personnel working in the field of ship-building.

COVERAGE: The booklet presents an account of plant experience with various types of electric-arc and resistance welding. Various types of automatic and semiautomatic welding equipment and welding techniques are described. The following personalities took part in developing and introducing various welding techniques:

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CIA-RDP86-00513R000721530007-6"

F. B. Dreyzenshtok, P. D. Korobov, A. D. Sidorov, N. V. Kornil'yev, M. S. Kerner, Yu. V. Komissarov, A.S. Felikson, M.A. Antipov, F.T. Novikov, P.A. Alekseyev, and V.V. Men'shenin. The author thanks engineer D.I. Vaynboym for his valuable comments on the manuscript. There are 9 Soviet references.

TABLE OF CONTENTS:

From the author

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PART I. ELECTRIC-ARC WELDING

- Ch. I. Semi-automatic Electric-arc Welding Equipment
1. Stud-welding equipment
 2. Classification of plug-welding equipment
 3. Equipment for plug welding in vertical plane
 4. Equipment for continuous and interrupted welding

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- Ch. II. Automatic Electric-arc Welding Equipment
5. Machines for assembly and welding of T-beams
 6. Equipment for welding of fittings to steel pipe
 7. Equipment for welding of cylindrical containers

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KERNER, M.S., inzh.

Device for semiautomatic, intermittent welding under flux.
Sudostroenie 24 no.1:53-55 Ja '58. (MIRA 11:2)
(Electric welding--Equipment and supplies)

KERNER, M.S., inzh.

Modernization of the ATP-75 contact welding machine. Sudostroenie
24 no.4:49-51 Ap '59. (MIRA 11:4)
(Electric welding)

KERNER, M.S., inzh.

Unit used for contact butt welding with automatic preheating.

Sudostroenie 24 no.7:62-63 J1 '58.

(MIRA 11:9)

(Electric welding)

25(1)

SOV/135-59-5-13/21

AUTHOR: Kerner, M.S., Engineer

TITLE: Saving Acetylene in Steel-Cutting

PERIODICAL: Svarochnoye proizvodstvo, 1959, Nr 5, pp 32-34 (USSR)

ABSTRACT: The article describes how workers from the Otdel svarki Leningradskogo zavoda im. A.A. Zhdanova (Welding Section of the Leningrad Plant imeni A.A. Zhdanov), the author of the article and Senior Engineer N.V. Kornil'yev have proposed and introduced a method of saving acetylene in oxy-acetylene steel cutting by automatically-reducing the amount of acetylene supplied to the flame when the cutting oxygen is turned on after the metal has been heated to ignition point. It is shown how reduction of the acetylene consumption from 2630 to 140 liters per hour reduces the effective output from 2190 to 340 calories per second thus increasing the efficiency of the flame from 26 to 77% (according to the data of N.N. Rykalin and M.Kh. Shorshorov). VNIIAVTOGEN also showed that the most effective oxygen - acetylene relationship when heating up solid surfaces is 1.7. Descrip-

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SOV/135-59-5-13/21

Saving Acetylene in Steel-Cutting

tions are given of an electro-magnetic valve for economical oxy-acetylene cutting submitted by N.V. Kornilov and a mechanical valve attachment designed by gas welder V.V. Panov. Table 1 shows data on the saving of acetylene when different sizes of nozzles designed by VNIIAVTCEN are used. When this method was introduced into the plant, 50-60% of acetylene was saved in cutting steel 22 mm thick. The annual saving was 28,500 cubic meters. The method would save about 500,000 rubles annually. There are 3 diagrams, 2 graphs, 3 tables and 3 references, 2 of which are Soviet and 1 German.

ASSOCIATION: Leningradskiy zavod im. A. A. Zhdanov (Leningrad Plant imeni A. A. Zhdanov)

Card 2/2

KERNER, M.S., inzh.

Method for economical acetylene-oxygen cutting. Sudostroenie 25 no.1:
73-76 Ja '59. (MIRA 12:3)
(Gas welding and cutting) (Ships--Welding)

KOROBov, P.D., inzh.; ~~KERNER, M.S., inzh.~~

Manufacturing welded superstructures using aluminum-
magnesium alloys. Sudostroenie 25 no.5:47-53 My '59.
(MIRA 12:8)
(Ships--Welding) (Aluminum-magnesium alloys)

KERNER, M.S., inzh.

Improving the quality of butt-welded bulb-bar frame joints.
Sudostroenie 26 no. 11:51-55 N '60. (MIRA 14:1)
(Ships—Welding) (Hulls (Naval architecture))

KERNER, Mendel' Saulovich; LEVCHENKO, Ya.V., inzh., red.; SHILLING, V.A.,
red. izd-va; BELOGUROVA, I.A., tekhn.red.

[Joining of linoleum sheets by means of welding] Soedinenie listov
linoleuma svarkoi. Leningrad, 1961. 9 p. (Leningradskii Dom
nauchno-tekhnicheskoi propagandy. Obmen peredovym opytom. Seriya:
Stroitel'naya promyshlennost', no.15) (MIRA 14:9)
(linoleum)

DZHIVAGA, Ivan Ivanovich; KERNER, M.S., retsenzent; ABRAMOVICH, V.R.,
retsenzent; RUSSO, V.I., retsenzent; ISKOZ, B.B., nauchnyy red.;
LISOK, E.I., red.; KRYAKOVA, D.M., tekhn. red.

[Electric arc welding of nonferrous metals and alloys] Elektrodu-
govaia svarka tsvetnykh metallov i splavov. Leningrad, Gos.
soiuznoe izd-vo sudostroitel'noi promyshl., 1961. 138 p.

(MIRA 14:9)

(Nonferrous metals—Welding)

ABELISHVILI, G.V.; VASIL'YEV, V.V.; KERNER, N.A.

Underwater antiseepage screening in reservoirs. Trudy Gruz
NIIGIM no.21:309-316 '60. (MIRA 16:1)
(Reservoirs) (Seepage)

ZILAHÍ, Zoltan, dr.; ALPAR, Gyorgy, dr.; KERNER, Pal, dr.

Lumbar anesthesia with Tetracaine in 250 surgical cases.
Orv. hetil. 104 no.41:1936-1938 13 0 '63.

(ANESTHESIA, SPINAL) (TETRACAINE)
(HYSTERECTOMY) (CESAREAN SECTION)
(ADNEXA UTERI) (VULVA)
(SURGERY, OPERATIVE)

ZILAHY, Zoltan, dr.; KERNER, Pal, dr.

Our case of simultaneous intra- and extrauterine pregnancy.
Magy.noorv.lap. 27 no.1:35-38 J '64.

1. A XX. ker. Szülo es nőbeteg Kórház közleménye.

1. KERNER, S.
2. USSR (600)
4. Electric Welding
7. Examples from contact welding practice, Avtog.delo 24 no. 3, 1953.

9. Monthly List of Russian Accessions, Library of Congress, APRIL 1953, Uncl.

PHASE I BOOK EXPLOITATION

835

Kerner, S.S.

Uslavlivaniye pylevidnykh otkhodov tverdykh splavov pri zatochke instrumentov
(Collecting Hard-alloy Dust Waste in Tool Sharpening) Leningrad, 1955.
6 p. (Series: Leningradskiy dom nauchno-tekhnicheskoy propagandy.
Informatsionno-tekhnicheskoy listok, no. 25 /673) 7,000 copies printed.

Sponsoring Agencies: Vsesoyuznoye obshchestvo po rasprostraneniyu politicheskikh
i nauchnykh znaniy, Leningradskiy dom nauchno-tekhnicheskoy propagandy.

Ed.: Verzhbinskaya, I.I.; Tech. Ed.: Gvirtz, V.L.

PURPOSE: This booklet is intended for engineers working in the field of
industrial ventilation and exhaust.

COVERAGE: The booklet describes principles of construction and rules for
operating the MIOT (Moscow Institute for Protection of Labor) dust collecting
unit used in sharpening hard-alloy tools. The unit is used not only to
maintain clean air but also to recover waste materials for useful purposes.

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Collecting Hard-alloy Dust Waste in Tool Sharpening

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"APPROVED FOR RELEASE: 06/13/2000

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It is claimed that this unit is very effective in recovering material
such as tungsten. In 30 percent of total dust collected, the tungsten
content was about 22 percent. A complete description and illustration
of the above unit is presented. No Table of Contents is given. The
subjects discussed are the following:

1. Operating Principles, Purpose, and Rules for Operating the MIOT Dust
Collecting Unit 2
2. The MIOT-54 Exhaust Hood 2
3. Dust Collectors 6
4. Appendix: Simplified Method of Determining Tungsten Content in Dust
Wastes Used at the Moscow Machine Tool Building Plant 8

AVAILABLE: Library of Congress

Card 2/2

GO/jmr
11-10-58

KERNER, Tibor

"Mechanization of labor consuming processes in sugar factories"
by V.L. Marjancsik [Maryanchik, V.L.], A.V. Budnij [Budniy,
A.V.], V.A. Bondarenko. Reviewed by Tibor Kerner. Cukor 14
no.5:3 of cover My '61.

KERNER, Tibor

Mechanization of fuel transportation. Cuker 14 no. 11:311-312. N '61

KERNER, Tibor

"Quality of raw juice due to retaking slice press water into diffusion"
by I.M.Litvak, A.A. Lipec. Reviewed by Tibor Kerner. Cukor 16 no.2:
60-61 F '63.

KERNER, Tibor

"Sampling for detecting impurities by means of the Rupro device"
by I.G.Kazakov, L.E. Sojhet. Reviewed by Tibor Kerner. Cukor 16
no.2:61 F '63.

KERNER, Tibor

"Sorption of coloring agents by ion exchangers" by A.R. Szapronov [Sapronov, A.R.], G.A. Csikin [Chikin, G.A.].
Reviewed by Tibor Kerner. Cukor 16 no.6:4 of cover
Je '63.

KERNER, Tibor

"Perlite as a filtering substance" by B.N. Teresin
[Tereshin, B.N.]. Reviewed by Tibor Kerner. Cukor 16
no.6:182 Je '63.

KERNER, Tibor

"Steam boiler surface cleaning by soda solutions" by Z.J. Ruvkin.
Reviewed by Tibor Kerner. Cukor 16 no.7:213 J1 '63.

KERNER, Tibor

"Hydropneumatic testing of the levels of carbonated juice sedimentators" by V.N.Peletminszkij. Reviewed by Tibor Kerner. Cukor 16 no.10:3 of cover 0 '63.

KERNER, Tibor

"Increasing labor productivity as the most important task of the
sugar industry" by Sz.I. Pedgocs. Reviewed by Tibor Kerner. Cukor
16 no.10:297 0 '63.

KERNER, Tibor

"Experiments for automation of sugar beet transportation" by
M.A.Turkin. Reviewed by Tibor Kerner. Cukor 17 no.11:316
N '64.

KERNER, Tibor

"Rational construction of carbonated juice sedimentation apparatus" by Csugunov. Reviewed by Tibor Kerner. Cukor 18 no.3:88 Mr '65.

KERNER, Tibor

"Carbonators in the Soviet sugar factory" by Barlink. Reviewed
by Tibor Kerner. Culor 18 no.3:99 Mr '65.

KERNER, Tibor

"Simplification of technological patterns" by Borisavics,
Sofronjuk. Reviewed by Tibor Kerner. Cukor 18 no.3: 6 Mr '65.

VOSZTOKOV, A. J. (Soviet Union); IEPESKIN, I. P. (Soviet Union); KENNER, Tibor

Corrected calculation of evaporators. Sukor 18 no.3:72-- M '65.

KERNER, Tibor

After the 20th Congress of Hungarian Trade Unions. Munka 13
no.12:17 D'63.

1. 62-es Postahivatal, Budapest.

KERNER, V. K.

Semiautomatic unit for the chemical cleaning of files. Biul.tekh.-
ekon.inform. no.10:6-8 '60. (MIRA 13:10)
(Files and raspt)

ODUD, Afanasiy Iukich; KERNER, Ye., red.; MANDEL'BAUM, M., tekhn.red.

[The Moldavian Soviet Socialist Republic] RSS Moldoveniasko.
Kishineu, Editura de stat a Moldovei, 1957. 271 p. (MIRA 12:8)
(Moldavia--Physical geography) (Moldavia--Economic conditions)

KERNERMAN, R.P.

Plastic surgery through implantation under the scrotal skin in
epifascial gangrene of the penis. Urologia 23 no.4:59 J1-Ag '58
(MIRA 11:8)

1. Iz khirurgicheskogo otdeleniya Barabinskoy gorodskoy bol'nitsy
(glavnyy vrach O.P. Bugrova)
(PENIS--SURGERY)

KERNERMAN, V.

Ways for overall mechanization and automation of ship repair.
Mor. flot 25 no.4:28 Ap '65. (MIRA 18:6)

1. Starshiy inzh. Proyektno-konstruktorskogo i tekhnologicheskogo
instituta Kiyevskogo soveta narodnogo khozyaystva.